



Command, Control, Communication and Computer Intelligence Reconnaissance (C4ISR)

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Navy IPO C4ISR Strategy

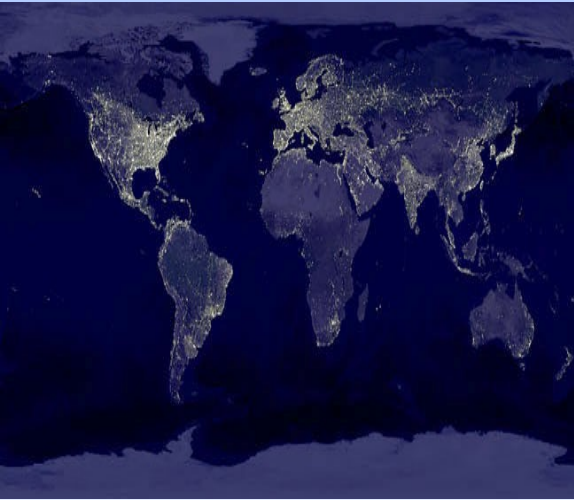
- **Successful Coalition/Allied Warfare depends upon Coalition and Alliance Building and Interoperability**
- **Capabilities Focus - Sea Power 21 aligns US naval missions networked with our coalition partners and allies**
- **Countries Small to Big -- all important**
- **Way ahead:**
 - **Current and future international coalitions require coordinated matching of interoperability requirements now**
 - **To meet each country's own homeland defense requirements**
 - **To meet COCOM objectives**
 - **We want to:**
 - **Build on advanced capability planning**
 - **Work with our partners/allies to foster the best robust, phased strategy-to-systems process to link our capabilities**
 - **Combined C4ISR delivers a powerful, collective force in the Global War on Terrorism**

C4ISR - A SEAPOW 21 FOCUS

- **Security Cooperation Objectives**
- **Coalition Sea Power 21 Capabilities**
- **Strategy to Systems**
- **C4ISR Roadmap**
- **Summary**

Security Cooperation Objectives

Coalition Building



**Interoperability with
Global Naval Partners**



Foreign Capabilities



**Navy IPO collaborates with other
government agencies to support
implementation of
partner maritime / aviation objectives --
focused on capabilities**

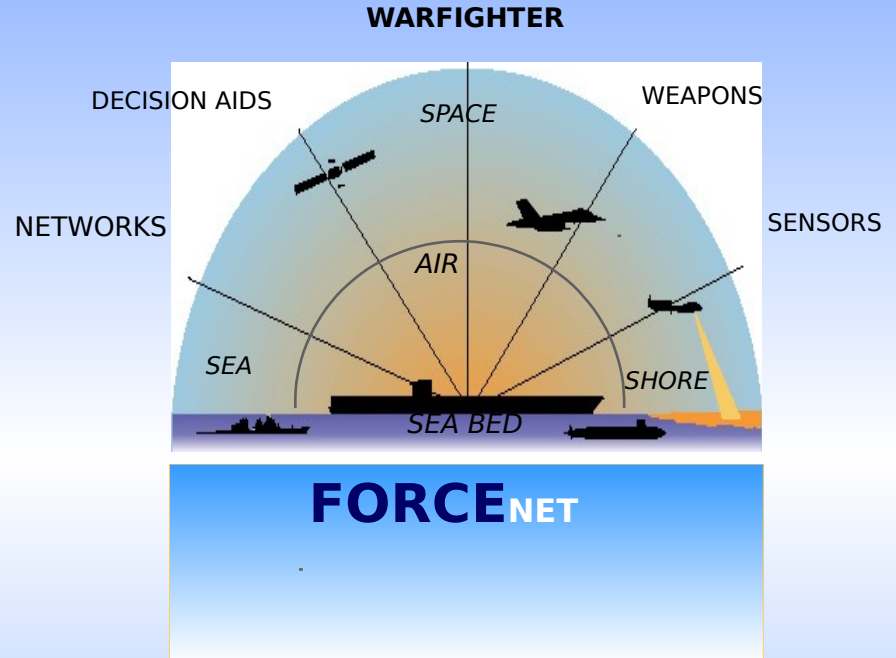
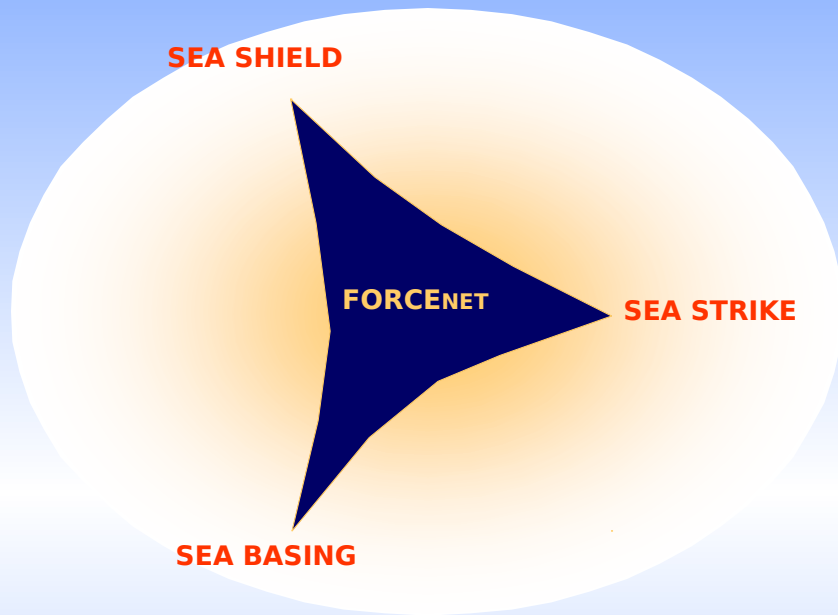
Naval Transformation Trends

RECAPITALIZATION & MODERNIZATION ARE MAKING U.S. NAVAL FORCES MORE . .

- **EXPEDITIONARY**
 - ***LIGHTER, MORE FLEXIBLE FORCES***
 - ***MORE LETHAL POWER***
- **JOINT**
 - ***WITH OTHER SERVICES & ALLIES***
- **NETWORKED**
 - ***LINKAGE OF ALL ASSETS IN THE “BATTLESPACE”***
 - ***PERSISTENT INTELLIGENCE, SURVEILLANCE, RECONNAISSANCE (ISR)***
- **PRECISE**
 - ***REDUCED “SENSOR-TO-SHOOTER” TIMELINES***
 - ***PRECISION FROM DISTANCE***
- **ALIGNED IN ORGANIZATION**
 - ***BUSINESS EFFICIENCIES***
 - ***MORE SUPPORT FOR FLEET WARFIGHTERS***
- **RELIANT ON UNMANNED ASSETS**
 - ***UAVs, UCAVs, UUVs***

FORCEnet

Capabilities Alignment



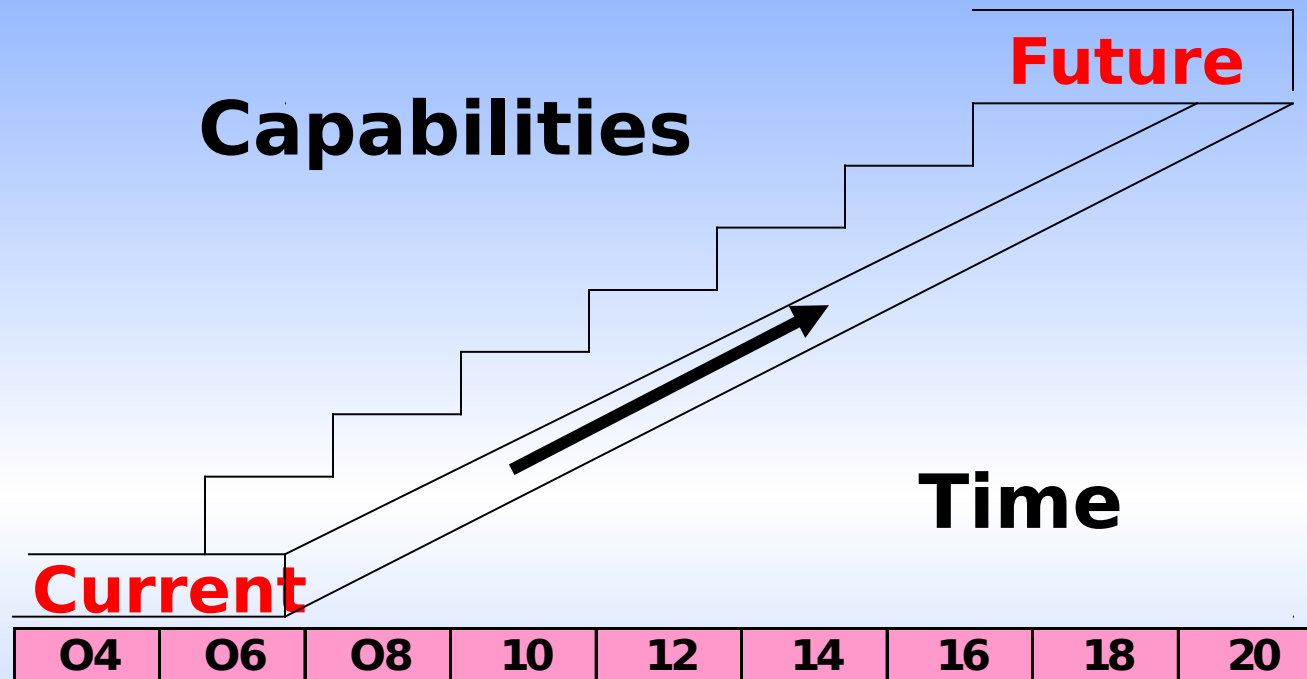
**Sea Power 21 Pillars:
Sea Strike, Sea Shield, Sea Basing, and
FORCEnet**

www.chinfo.navy.mil/navpalib/cno/proceedings.html

Coalition Seapower 21 Capabilities

| Sea Strike | Sea Shield | | Sea Basing | FORCEnet |
|--|--|--|---|--|
| Conduct Strike Ops | Protect Against SOF/Terrorist Threats | Counter Minefields from Deep to Shallow Water | Provide Sea Base Force Protection | Provide Network Protection |
| Conduct Special Ops | Provide Search & Rescue | Conduct Mining Operations | Provide Administrative Sea Lift | Provide Information Transfer |
| Conduct Offensive Information Ops (EW/CNA) | Provide Self-Defense vs. Surface Threats | Conduct Expeditionary MIW | Provide Sustainment for Operations at Sea | Provide Deployable ISR Assets |
| Provide Naval Fires | Conduct Offensive Operations vs. Surface Threats | Provide Self-Defense Against Air and Missile Threats | Provide Sustainment for Operations Ashore | Share ISR Across the Force |
| Provide Indigenous Amphibious Assault Forces | Conduct Expeditionary MIO/LIO Ops | Provide Overland Air and Missile Defense | | Participate in Mission Planning |
| Conduct Ship to Objective Maneuver (STOM) | Conduct Escort Ops | Conduct Sea-based Ballistic Missile Defense | | Maintain Operational Level Situational Awareness |
| | Neutralize Submarine Threats in the Littorals | Provide Area/Task Group Air and Missile Defense | | Maintain Tactical Level Situational Awareness |
| | Neutralize Open Ocean Submarine Threats | | | |

Country Stair Steps to Capabilities



Coalition and Interoperability Partner Goals

Minimum Ability to:

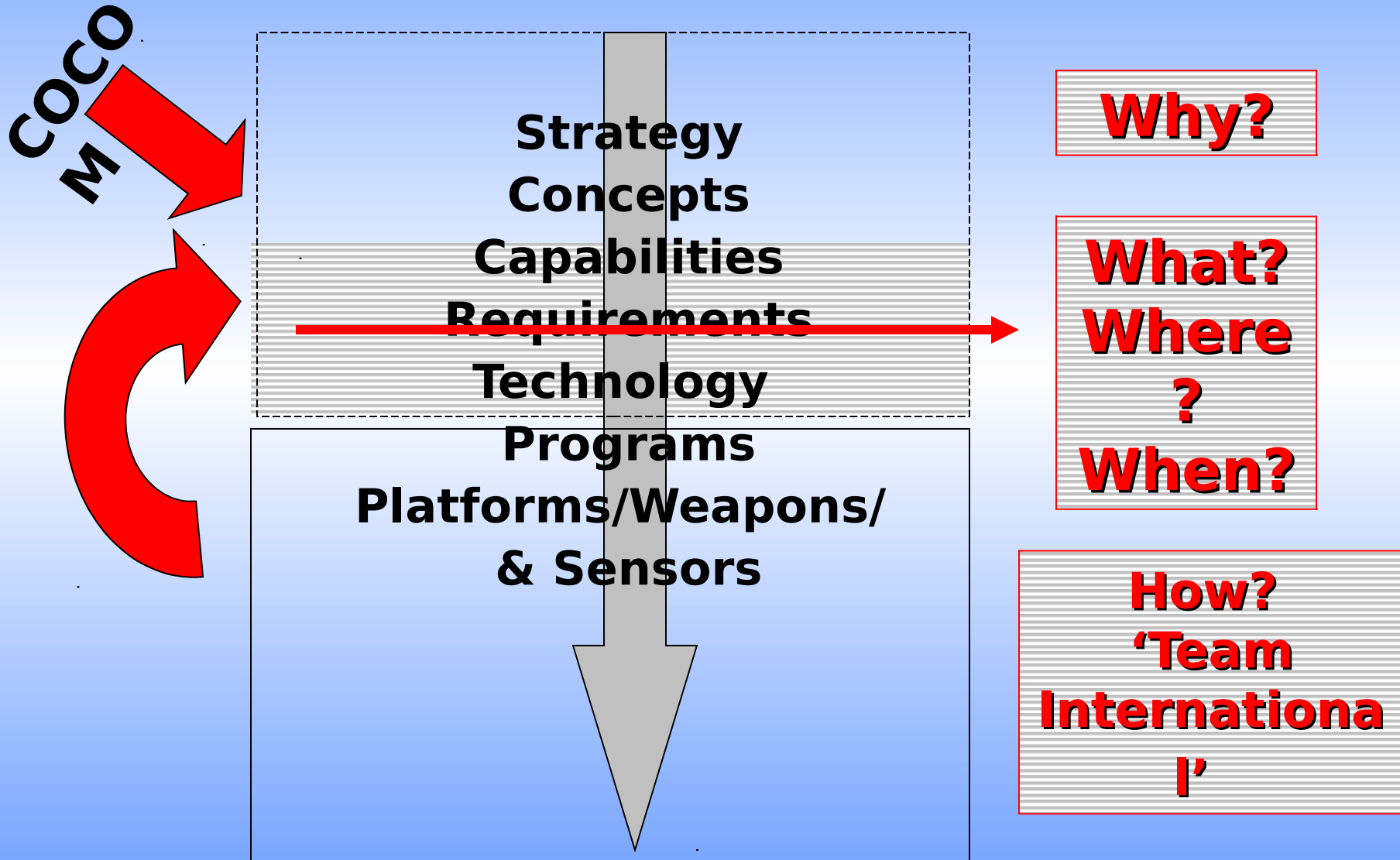
Link into U.S. theater command nets

Contribute to common operational and tactical picture

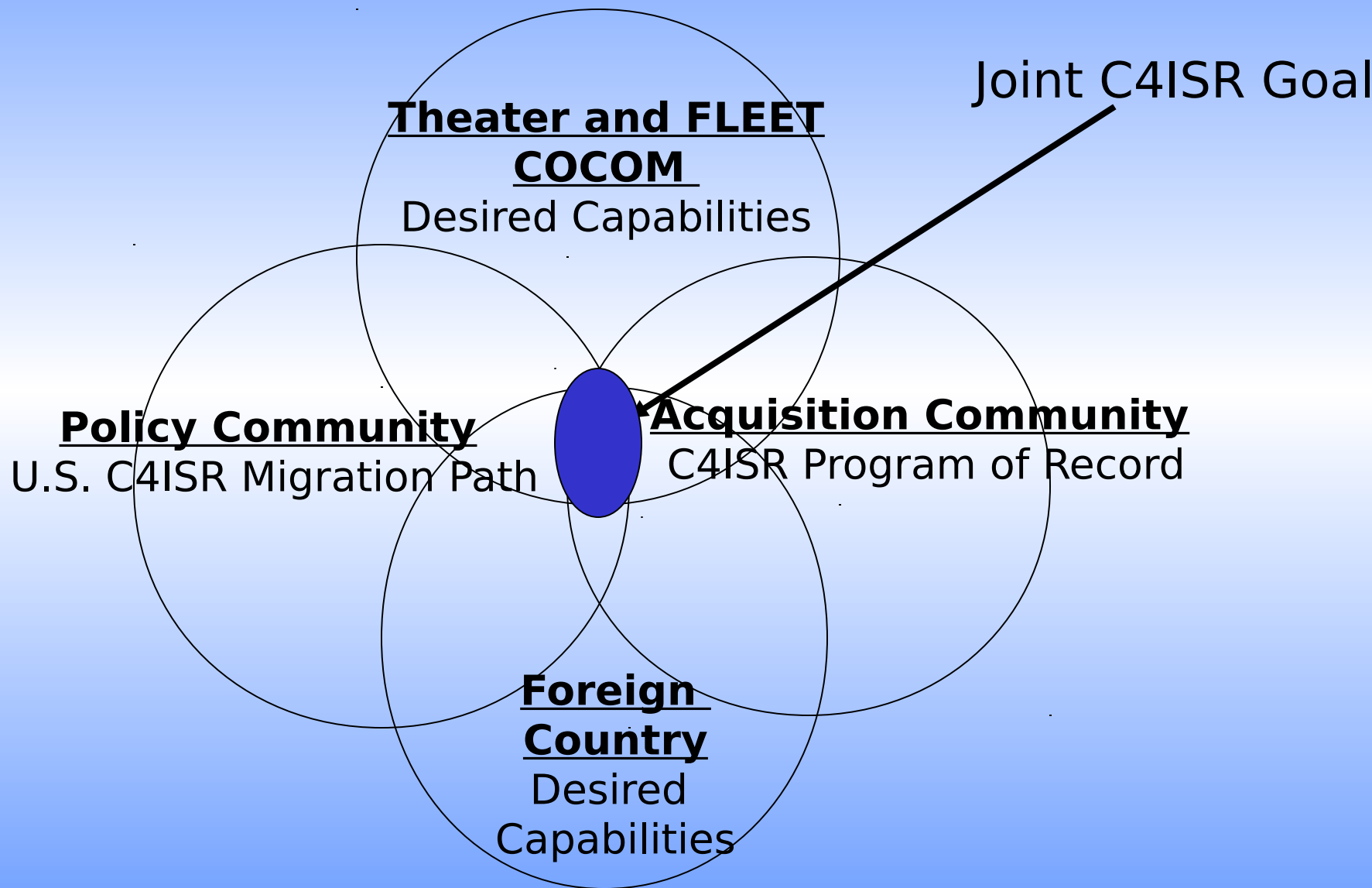
Coordinate air, surface and subsurface operations

Country Homeland Defense

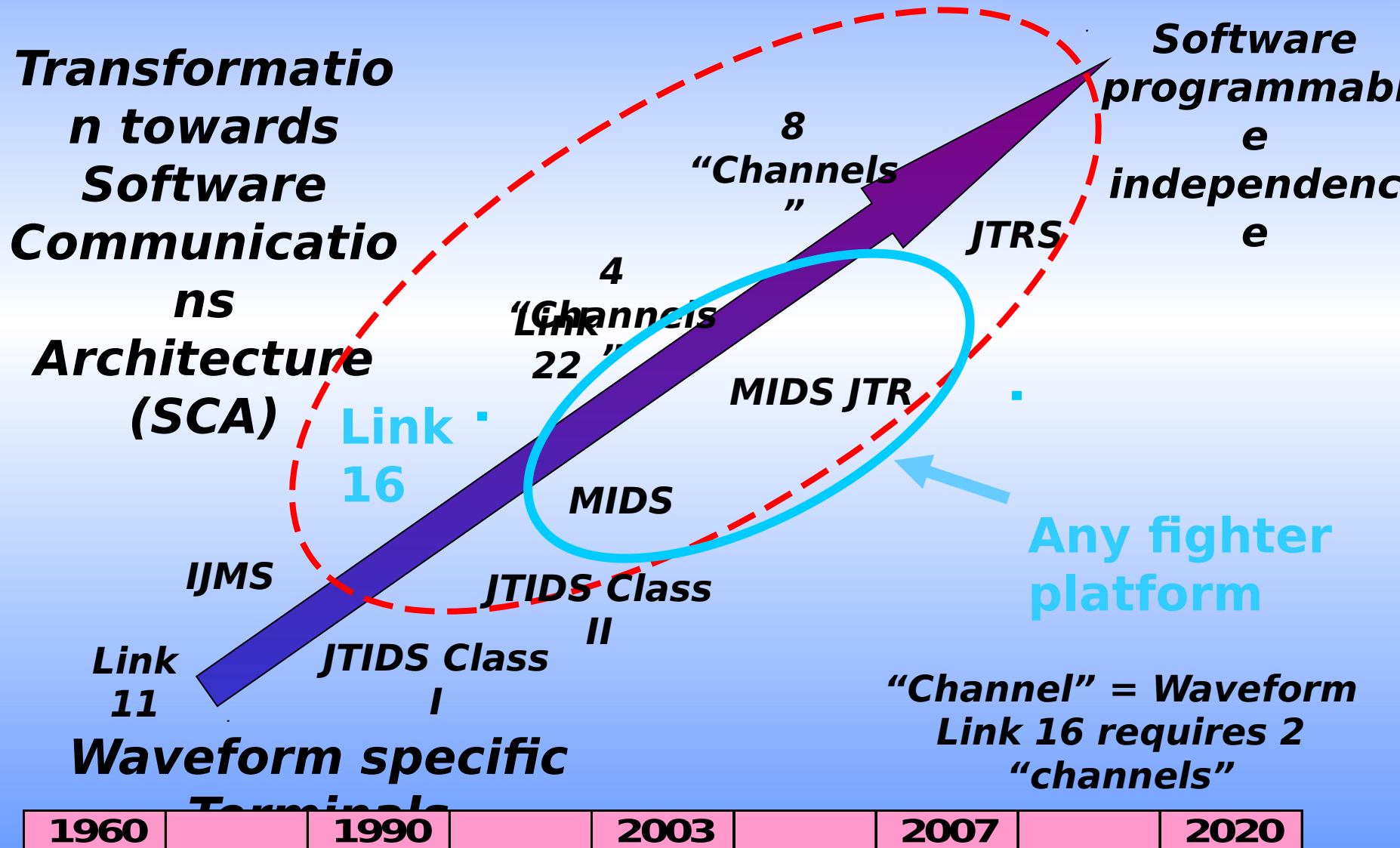
Strategy to Systems



C4ISR Coalition / Interoperability Partner Challenge



C4ISR Capability Roadmap - Data Links



Seapower 21 Coalition

Capabilities

FORCEnet

| <i>Capabilities</i> | <i>Examples of Products</i> |
|---|---|
| Provide Network Protection | Information Assurance |
| Provide Information Transfer | Data Links --- JTRS |
| Provide Deployable ISR Assets | Global Hawk, Broad Area Maritime Surveillance (BAMS), Multi-Mission Maritime Aircraft (MMA) |
| Share ISR Across the Force | Data Links --- JTRS |
| Participate in Mission Planning | Global Command and Control System (GCCS) |
| Maintain Operational Level Situational Awareness | Common Operational Picture (COP) |
| Maintain Tactical Level Situation Awareness | Common Tactical Picture (CTP) |

Global Information Grid

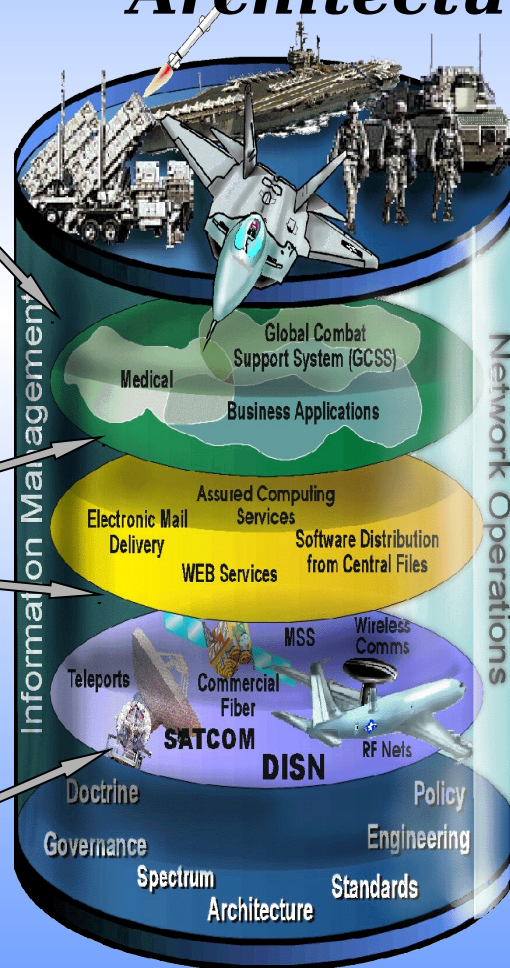
FORCEnet NCPs

**Common
Operational
and Tactical
Picture**

**Communicatio
n and
Data
Networks**

**Intelligence,
Surveillance &
Reconnaisanc
e**

GIG Architecture



Navy IPO Products and Processes

- **Foreign Military Sales**
 - ***Price and Availability***
 - ***Letters of Offer and Acceptance***
- **Excess Defense Articles**
 - ***Grant and Sale***
- **Training Support (thru NETSAFA)**
- **Team International**
- **Cooperative Programs**
- **Foreign Comparative Testing**
- **MOUs**
- **Export Licenses**
- **Data Exchange Agreements**
- **Technology Transfer**
- **Visit Requests**

Summary

- **Coalition Building and Interoperability**
- **Capabilities Focus - Sea Power 21 alignment, directed by COCOM**
- **Countries Small to Big -- all important**
- **Join us in the iterative strategy-to- systems process using the Phased approach for C4ISR**
- **Our common goals demand the best connectivity for everyone's Homeland Defense in this Global War on Terror**